

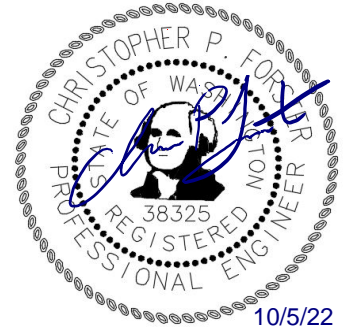
## MEMORANDUM

**DATE:** October 5, 2022

**TO:** Holly Keaton, Senior Current Planner  
City of Issaquah

**FROM:** Mike Crimmins / Chris Forster, P.E.  
TENW

**SUBJECT:** Limited-Scope Transportation Impact Analysis  
Towns on 7th  
TENW Project No. 2022-090



The purpose of this memorandum is to document the transportation impacts of the proposed Towns on 7th project. The scope of this analysis was based on City comments received on September 12, 2022 which noted that although a full Transportation Impact Analysis (TIA) is not required, a limited scope analysis memo is required to address localized transportation impacts. In addition to a project description, trip generation estimate, and trip distribution information, this memo includes a discussion of existing multimodal transportation facilities in the vicinity, parking requirements, sight distance, site circulation, and local street characteristics.

### Project Description

The proposed *Towns on 7th* is bordered by Newport Way NW to the west, NW Holly Street to the south, and 7th Ave NW to the east as shown in the site vicinity map in **Attachment A**. The proposed project would include the development of up to 30 townhome units on a site that is currently occupied by two (2) single-family detached homes and two (2) mobile homes, which will be removed with the proposed project. Primary access to the site would be provided by a proposed full-access driveway on 7th Ave NW. The anticipated project buildout year is 2026. A preliminary site plan is shown in **Attachment B**.



## EXISTING CONDITIONS

This section describes existing multimodal transportation system conditions in the study area. Existing conditions include an inventory of existing roadways, public transportation services, and non-motorized transportation facilities.

### Existing Site

The existing site consists of two (2) single-family detached homes and two (2) mobile homes, which will be removed with the proposed project. Access to the existing uses is currently provided by multiple residential driveways on 7<sup>th</sup> Ave NW and NW Holly Street.

### Roadway Network

The roadways used as primary routes to and from the proposed site are described in **Table 1**.

**Table 1**  
**Existing Roadway Network Summary – Project Site Vicinity**

Roadway	Orientation	Arterial Classification	Speed Limit	Number of Travel Lanes	Street Parking	Sidewalks	Bicycle Facilities
Newport Way NW	N/S	Principal Arterial	30	2	No	East Side (Intermittent)	Paved Shoulders
7 <sup>th</sup> Ave NW	N/S	Local Street	25	2	Yes	East Side	None
NW Holly St	E/W	Local Street	25	2	No	Both Sides	None

### Public Transportation Services

Transit service to and from the project vicinity is provided by King County Metro. The nearest transit stops to the project site are currently located on NW Gilman Blvd just east of 7<sup>th</sup> Ave NW. The bus stop on the south side of NW Gilman Blvd provides access to routes 208 and 271. The bus stop on the north side of NW Gilman Blvd provides access to routes 208, 214, and 271. It should also be noted that the Issaquah Transit Center is located approximately 1 mile walking distance from the site and provides express route service to downtown Seattle via Sound Transit route 554, Seattle's University District via Sound transit route 556, and to Overlake via King County Metro route 269.

### Non-motorized Transportation Facilities

Non-motorized transportation facilities in the project area include sidewalks on the east side of 7<sup>th</sup> Ave NW in the project vicinity. There are no bicycle facilities in the immediate project vicinity, although paved shoulders are present on Newport Way NW, to the west of the project site. Additionally, there are numerous low-volume local streets in the project vicinity that could be utilized by cyclists and the Juniper and East Lake Sammamish Trails are accessible within 0.5 miles from the site.

## FUTURE CONDITIONS AND PROJECT IMPACTS

### Trip Generation

The weekday daily, AM and PM peak hour trip generation estimates for the proposed and existing uses were calculated based on methodology documented in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition for Land Use Code (LUC) 210 (Single-Family Detached Housing), LUC 215 (Single-Family Attached Housing), and LUC 240 (Mobile Home Park). Credit was taken for the existing 2 single-family detached homes and 2 mobile homes to be removed with the project. **Table 2** summarizes the weekday trip generation with detailed trip generation calculations provided in **Attachment C**.

**Table 2**  
**Trip Generation Summary**

Time Period	Net New Trips Generated		
	In	Out	Total
Weekday Daily	68	68	136
Weekday AM Peak Hour	2	5	7
Weekday PM Peak Hour	5	5	10

As shown in **Table 2**, the proposed Towns on 7<sup>th</sup> project is estimated to generate 136 net new weekday daily trips, with 7 net new trips occurring during the weekday AM peak hour (2 in, 5 out) and 10 net new trips occurring during the weekday PM peak hour (5 in, 5 out).

### Trip Distribution

The distribution of project trips generated by the proposed Towns on 7<sup>th</sup> project was estimated based on existing and anticipated travel patterns and historical traffic volume data in the project vicinity. The net new peak hour project-generated trips are anticipated to be generally distributed to the street system as shown in **Table 3** below. **Attachment D** illustrates the distribution of net new peak hour project trips to and from the project site.

**Table 3**  
**Peak Hour Trip Distribution**

Route (Direction)	Trip Distribution
Newport Way NW (north)	40%
7 <sup>th</sup> Ave NW (north)	10%
Newport Way NW (south)	15%
NW Juniper St (east)	35%

### Site Access and Circulation

The proposed project includes a paved internal drive providing vehicular access to each townhome unit garage and off-street parking stall on the site. Vehicular access to the site from the public road network is provided by one driveway curb cut on 7<sup>th</sup> Avenue NW. No vehicle turning restrictions are proposed for the proposed driveway. Additionally, curb “bulb-outs” will be provided at the proposed driveway to improve

sightlines for drivers of vehicles exiting the site. No deviations from the City of Issaquah's street standards were requested or required for this project.

On-site pedestrian circulation will be facilitated by proposed on-site pedestrian-only through block pathways. One pathway runs east to west through the site, while the second pathway runs north to south. The proposed site layout is sufficient to accommodate both vehicular and non-motorized access to/from the project site.

## Sight Distance Assessment

The following summarizes the results of the sight distance assessment conducted at the proposed site access location on 7<sup>th</sup> Ave NW based on review of the City of Issaquah's *Street Standards (Transportation)*, *WSDOT Design Manual*, and field observations. The posted speed limit on 7<sup>th</sup> Avenue NW in the vicinity of the project is 25 mph and the design speed is also 25 mph based on its classification as a Local Street. Included in the sight distance assessment is an evaluation of pedestrian sight distance and intersection sight distance at the proposed site access location on 7<sup>th</sup> Avenue NW.

### Pedestrian Sight Distance (PSD):

City of Issaquah requirements state that the driver of an exiting vehicle shall be able to view objects within a clear view area between one foot to seven feet high at a distance of 15 feet (ft) from edge of the driveway throat when the driver's eye is located 14 ft behind the back of the sidewalk. The available PSD at the proposed site access location on 7<sup>th</sup> Ave NW looking north (left) and south (right) is anticipated to meet the City of Issaquah requirements based on field observations of the proposed site access location, assuming no new sight line obstructions are introduced as part of the project's frontage improvements.



PSD looking North from proposed site access on  
7<sup>th</sup> Ave NW



PSD looking South from proposed site access on  
7<sup>th</sup> Ave NW

### Intersection Sight Distance (ISD):

City of Issaquah and WSDOT standards state that Intersection Sight Distance (ISD) shall be measured from a point that is at least 14.5 feet back from the edge of the traveled way and 3.5 feet above the road surface, with visibility of an object 2 feet above the road surface in the center of the major through-street approach lane.

The required ISD at the proposed site access location on 7<sup>th</sup> Ave NW is 280 feet (ft) looking in both directions per City of Issaquah requirements. Based on field observations at the proposed site access location, the ISD looking in both directions is expected to be sufficient. It should be noted that the available sight distance looking south (right) is only 225 ft because 7<sup>th</sup> Avenue NW terminates at its intersection with NW Holly Street. Drivers looking south (right) are expected to have full view of vehicles turning from NW Holly Street onto 7<sup>th</sup> Avenue NW at this intersection, yielding the best achievable outcome given the context of the site access location. It should also be noted that on-street parking is permitted on 7<sup>th</sup> Avenue, meaning that parked vehicles will be present in the sight triangles as measured from the proposed access location at times. Per the City of Issaquah's *Street Standards (Transportation)*, parked vehicles are allowed in the sight area and will be evaluated on a case-by-case basis for the need to identify "No Parking" areas. Photos of the current views looking to the north and south from the proposed site access location are shown below.



ISD looking North from proposed site access on  
7<sup>th</sup> Ave NW



ISD looking South from proposed site access on  
7<sup>th</sup> Ave NW

### Stopping Sight Distance

Per City of Issaquah and WSDOT standards, the required Stopping Sight Distance (SSD) for a 25-mph design speed is 155 ft. Per WSDOT Standards, SSD was field measured with an object height of 2.0 feet above the road surface at the proposed site access location and a driver's eye height of 3.5 feet above the road surface as viewed by a driver approaching the proposed site access location from either direction.

Based on field measurements, the available SSD for vehicles traveling both northbound or southbound on 7<sup>th</sup> Ave NW approaching the proposed access driveway location exceeds 155 feet, meeting WSDOT and

City of Issaquah requirements. Photos of the current views looking towards the proposed site access location from both directions are shown below.



SSD looking south towards proposed site access  
on 7<sup>th</sup> Ave NW



SSD looking north towards proposed site access  
on 7<sup>th</sup> Ave NW

## Parking Assessment

On-site parking would be provided by a combination of surface parking stalls and garage spaces within each individual townhome unit. Per Table 18.608.050 in the draft version of the *Part 6 Development Standards – Issaquah Title 18 Code Update Project* document, single-family attached uses require a minimum of one and maximum of two off-street parking stalls per unit. The proposed project will provide a total of 60 off-street parking stalls for 30 units of single-family attached housing, meeting the code maximum allowable ratio of 2.0 off-street parking stalls per unit. Additionally, on-street parking is available in the site vicinity on 7<sup>th</sup> Avenue NW and NW Juniper Street.

## Non-Motorized Transportation Infrastructure

Based on methodology and data documented in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, LUC 215 (Single-Family Attached Housing), the number of peak hour non-motorized (pedestrian, bicycle, and transit) trips generated by the proposed project were estimated. The proposed project is estimated to generate 3 non-motorized trips during the AM peak hour and 5 non-motorized trips during the PM peak hour.

Sidewalks currently exist on the east side of the 7<sup>th</sup> Avenue NW but are not present along the site frontage. The proposed project would install new sidewalk along the site frontage on 7<sup>th</sup> Avenue NW and would also include mid-block pedestrian connections that will facilitate non-motorized travel to, from, and through the project site. Based on discussions with the project's civil engineer, the pedestrian improvements on the proposed project site are anticipated to be compliant with the requirements of the Americans with Disabilities Act (ADA).

Additionally, the City of Issaquah's *2023-2028 Transportation Improvement Program* includes the Newport Way - Maple to Sunset Improvements project (#TR 023). The project includes the installation of a roundabout at the intersection of Newport Way NW / Holly Street NW. Additionally, the City's planned project would include the construction of new sidewalks along Holly Street NW between 7<sup>th</sup> Avenue NW and Newport Way NW and along the east side of Newport Way NW between NW Holly Street and NW Juniper Street. The City's planned project also includes the construction of separated bicycle lanes along both sides of Newport Way NW in the project vicinity. It is anticipated that the existing and planned pedestrian and bicycle facilities in the project vicinity would accommodate the additional non-motorized trips generated by this project.

## Public Street Characteristics

As previously noted, the proposed project has frontage along three public streets – Newport Way NW, 7<sup>th</sup> Avenue NW, and NW Holly Street. Newport Way NW has standard dual-yellow centerline and solid white shoulder line channelization in the project vicinity. Limited channelization is present on 7<sup>th</sup> Avenue NW and NW Holly Street except for stop bars and marked crosswalks. The intersections of Newport Way NW / NW Holly Street and 7<sup>th</sup> Avenue NW / NW Holly Street both currently have minor street stop control. No revisions to existing channelization or traffic control are proposed at any locations in the project site vicinity.

## CONCLUSION

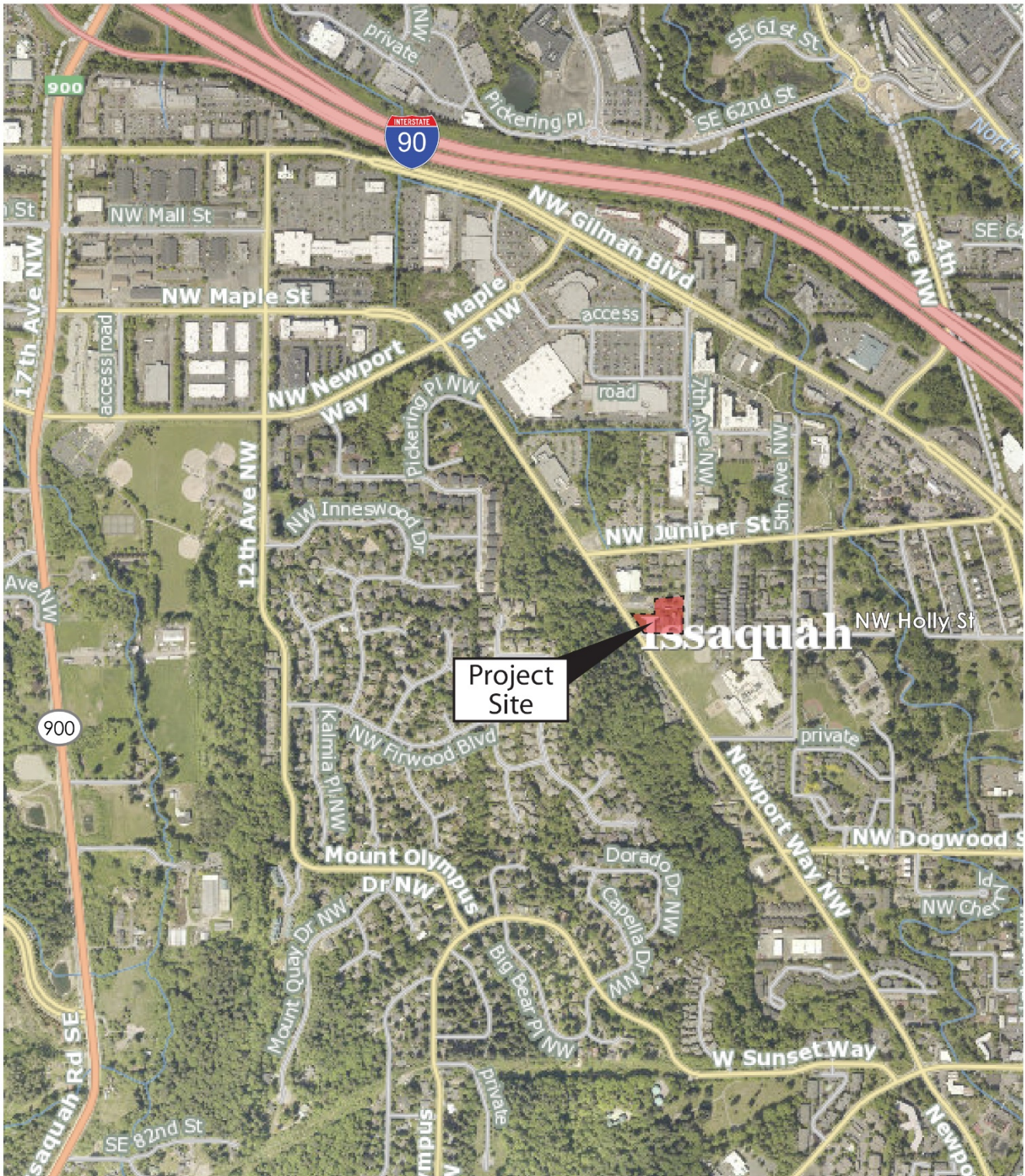
The traffic and parking impacts of the proposed *Towns on 7<sup>th</sup>* project are not expected to create a significant adverse impact to the local vehicular, pedestrian, bicycle, and transit networks. As a result, no project-specific traffic mitigation measures are proposed with this project.

If you have any questions regarding the information presented in this memo, please contact Mike at (425) 250-0869 or [crimmins@tenw.com](mailto:crimmins@tenw.com).

cc: George John, Blue Fern Development  
Holli Heavrin, Core Design, Inc.

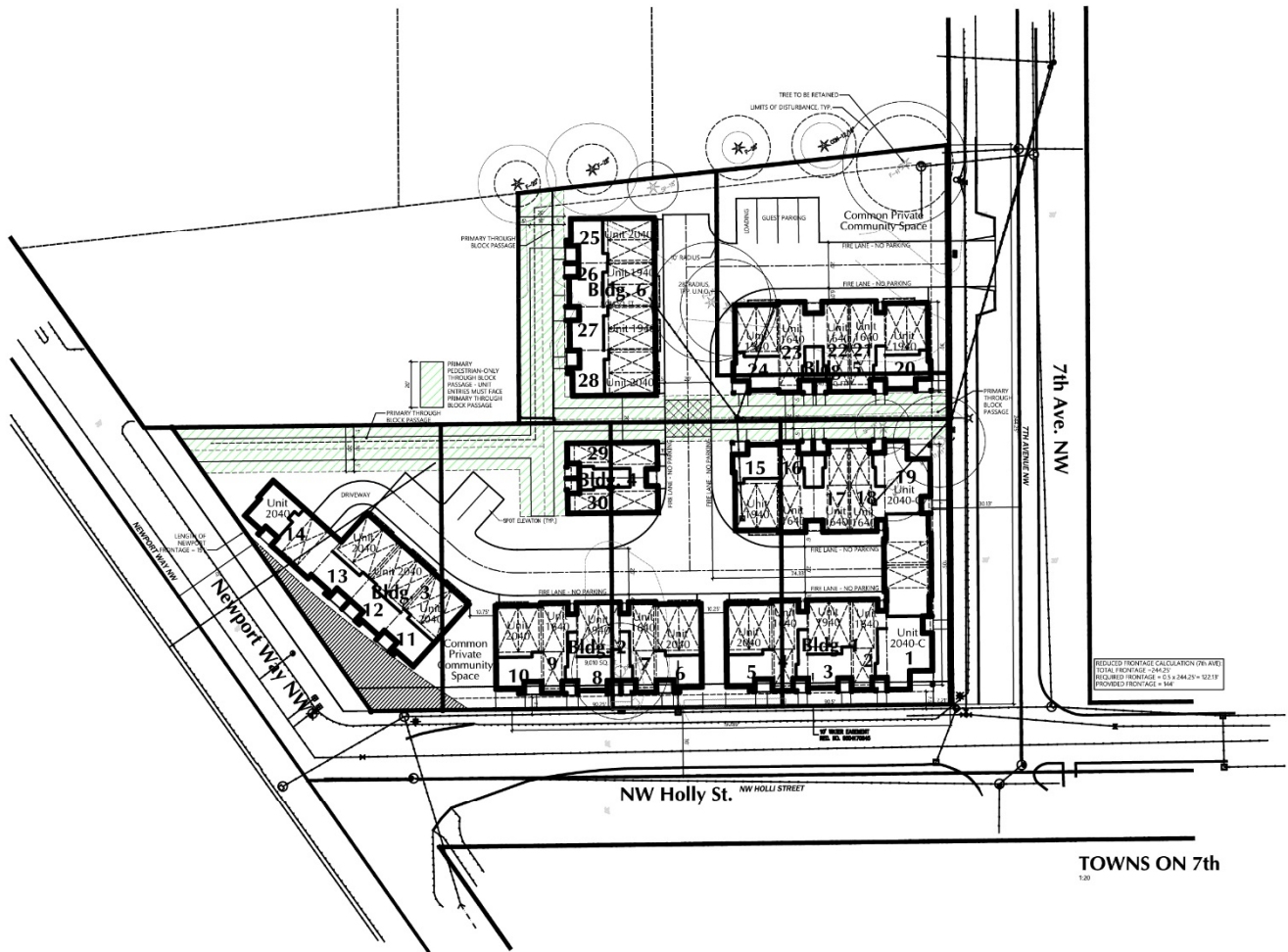
Attachments:

Attachment A: Project Site Vicinity  
Attachment B: Preliminary Site Plan  
Attachment C: Detailed Trip Generation  
Attachment D: Project Trip Distribution



**Attachment A:** Project Site Vicinity





Attachment B: Preliminary Site Plan



## ATTACHMENT C

### Detailed Trip Generation

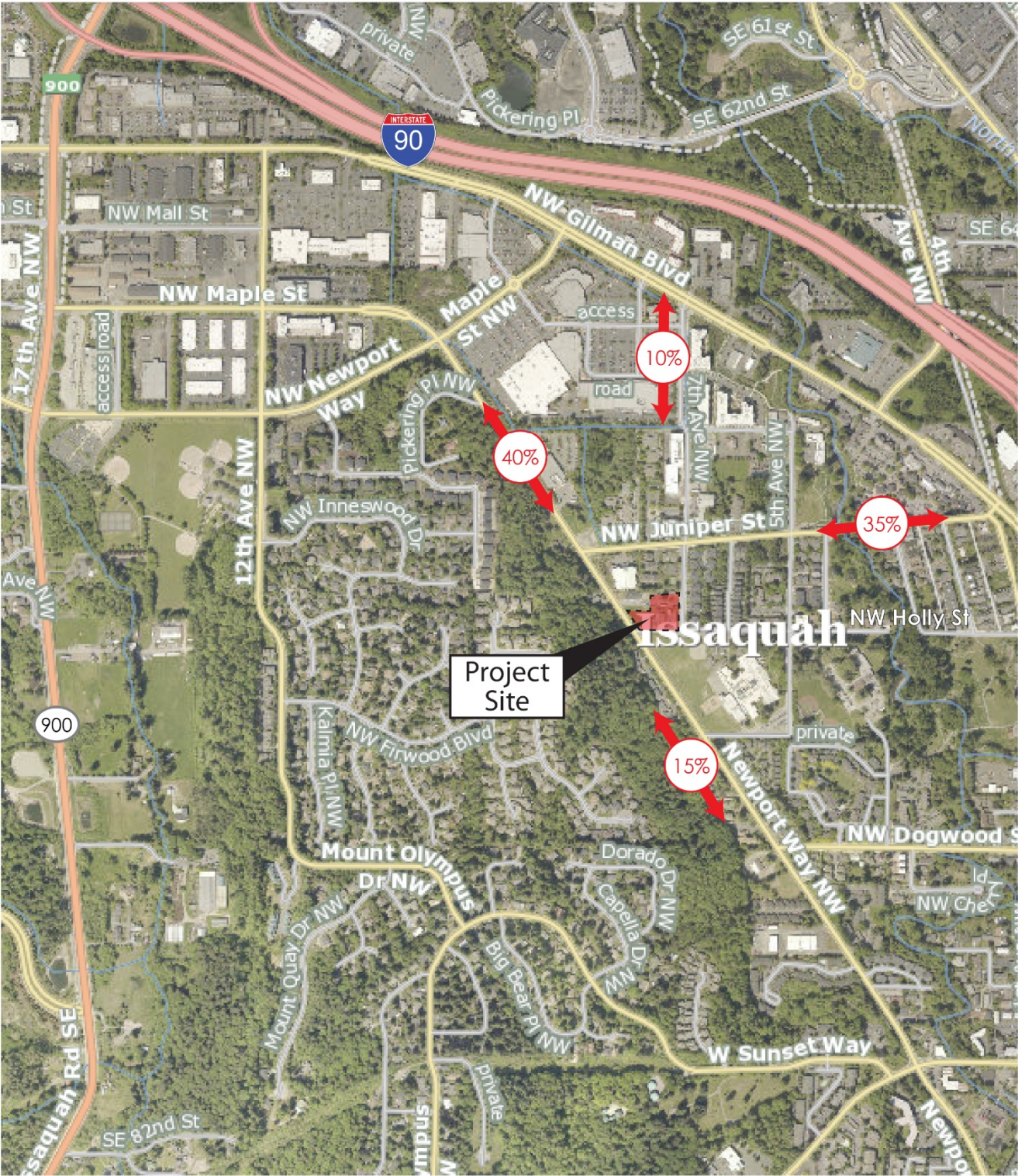
**Towns on 7th  
Weekday Trip Generation Summary**

Land Use	Units <sup>1</sup>	ITE LUC <sup>2</sup>	Directional Distribution <sup>2</sup>		Trip Rate <sup>2</sup>	Trips Generated		
			In	Out		In	Out	Total
<b>Daily</b>								
<b><u>Proposed Use:</u></b>								
Single-Family Attached Housing	30 DU	215	50%	50%	T = 7.62(X) - 50.48	89	89	178
<b><u>Existing Uses:</u></b>								
Single-Family Detached Housing	2 DU	210	50%	50%	Ln(T) = 0.92 Ln(X) + 2.68	-14	-14	-28
Mobile Home Park	2 DU	240	50%	50%	7.12	-7	-7	-14
						-21	-21	-42
<b>Net New Daily Trips Generated =</b>						<b>68</b>	<b>68</b>	<b>136</b>
<b>AM Peak Hour</b>								
<b><u>Proposed Use:</u></b>								
Single-Family Attached Housing	30 DU	215	31%	69%	T = 0.52(X) - 5.70	3	7	10
<b><u>Existing Uses:</u></b>								
Single-Family Detached Housing	2 DU	210	26%	74%	Ln(T) = 0.91 Ln(X) + 0.12	-1	-1	-2
Mobile Home Park	2 DU	240	21%	79%	0.39	0	-1	-1
						-1	-2	-3
<b>Net New AM Peak Hour Trips Generated =</b>						<b>2</b>	<b>5</b>	<b>7</b>
<b>PM Peak Hour</b>								
<b><u>Proposed Use:</u></b>								
Single-Family Attached Housing	30 DU	215	57%	43%	T = 0.60(X) - 3.93	8	6	14
<b><u>Existing Uses:</u></b>								
Single-Family Detached Housing	2 DU	210	63%	37%	Ln(T) = 0.94 Ln(X) + 0.27	-2	-1	-3
Mobile Home Park	2 DU	240	62%	38%	T = 0.57(X) + 0.35	-1	0	-1
						-3	-1	-4
<b>Net New PM Peak Hour Trips Generated =</b>						<b>5</b>	<b>5</b>	<b>10</b>

Notes:

<sup>1</sup> DU = Dwelling Unit.

<sup>2</sup> Land Use Code, trip rate, and directional splits from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition, 2021.



Attachment D: Project Trip Distribution

